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FROM TREXLER ETAL.

Amendments to the Claims:

1. (Currently Amended) A method of forming an interconnect in a substrate which

includes one or more dielectric layers and a copper deposit, said method comprising: forming a

trench in the substrate; forming a via in the substrate to the copper deposit; depositing an

interconnect liner layer of aluminum-copper alloy comprised primarily of Aluminum aluminum-

0.5% copper alloy in the trench and via; depositing copper onto the aluminum-copper aluminum-

0.5% copper alloy interconnect liner layer; and polishing the copper, wherein the interconnect

liner layer is a permanent component of the interconnect and does not interact with the copper or

copper deposit to form an alloy at any time while the method is performed.

2. (Currently Amended) A method as recited in claim 1, wherein the step of

depositing a layer of aluminum-copper alloy comprises depositing aluminum-0.5% copper alloy

comprises using a PVD technique.

3. (Currently Amended) A method of forming an interconnect in a substrate which

includes one or more dielectric layers and a copper deposit, said method comprising: forming a

trench in the substrate; forming a via in the substrate to the copper deposit; depositing an

intermediate liner layer in the trench and via and on the copper deposit; depositing an

interconnect liner layer of aluminum-copper alloy comprised primarily of Aluminum aluminum-

0.5% copper alloy on the intermediate layer; depositing copper onto the aluminum-copper

aluminum-0.5% copper alloy; and polishing the copper, wherein the interconnect liner layer is a

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permanent component of the interconnect and does not interact with the copper or copper deposit

to form an alloy at any time while the method is performed.

4. (Currently Amended) A method as recited in claim 3, wherein the step of

depositing a layer of aluminum-copper alloy comprises depositing aluminum-0.5% copper alloy

comprises using a PVD technique.

5. (Original) A method as recited in claim 3, wherein the step of depositing an

intermediate liner layer comprises depositing Ta/TaN.

6. (Currently Amended) An interconnect in a substrate which includes one or more

dielectric layers, said interconnect comprising a first copper deposit, a second copper deposit, and

an aluminum-copper aluminum-0.5% copper alloy interconnect liner comprised primarily of

Aluminum and disposed between and in contact with the first and second copper deposits and

between the second copper deposit and at least one of the dielectric layers, wherein the

interconnect liner is a permanent component of the interconnect and is not combined with either

of the copper deposits to form an alloy.

7. (Previously Presented) An interconnect as recited in claim 6, wherein the

aluminum-copper alloy interconnect liner has been deposited using a PVD technique.

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8-14. (Cancelled)

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